

FEDERAL COMMUNICATIONS COMMISSION

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NOV 8 2007

Georgia Public Telecommunications Commission
260 Fourteenth Street NW
Atlanta, GA 30318

In re: NEW (FM), Atlanta, GA
Georgia Public Telecommunications Commission ("GPTC")
Facility ID No. 176170
Application BNPED-20071022BFU

Dear GPTC:

This letter is in reference to the above-captioned application for a new noncommercial educational station on Channel 201B1 in Atlanta, GA.

GPTC's technical proposal. GPTC proposes to colocate its antenna on the same tower as second-adjacent channel station WRAS (FM), which is licensed to Georgia State University in Atlanta.¹ GPTC recognizes that colocated second-adjacent channel stations violate the FCC's rule section 73.509, and requests waiver of that rule.

In addition, GPTC requests waiver of Section 73.509 with respect to cochannel station WJSP-FM, Warm Springs, GA. Specifically, the proposed 40 dBu interfering contour for the new station would significantly overlap the existing 60 dBu protected service contour for the licensed facilities of WJSP-FM. Also, the new station's proposed 60 dBu protected service contour would be wholly encompassed by WJSP-FM's 40 dBu interfering service contour. *See* the attached contour plot. Here too, GPTC requests waiver of Section 73.509 with respect to WJSP-FM.

In support of the requests for waivers of Section 73.509. GPTC is an agency of the state of Georgia, and is charged with providing noncommercial educational public radio and television service within that state. GPTC has been unable to date to provide such radio service to the state's capital and population center of Atlanta, because of the crowded band conditions in that area. GPTC states that grant of its application would permit it to serve 1,569,905 persons in the Atlanta area, and that the grant would also allow GPTC to fulfill its legislative mandate to serve the residents of the state.

With respect to second-adjacent channel station WRAS, GPTC provides a copy of a letter from Douglass E. Covey, Vice President for Student Affairs for Georgia State University, conveying the University's approval for the present proposal by GPTC. GPTC also states that by colocating the stations, the field strength of each station will fall off in a similar manner with increasing distance from the tower, so that the stations will not interfere impermissibly with each other.

¹ The facilities proposed for the new station are identical to those licensed for WRAS' auxiliary facility under license BXLED-20041110ACN.

Regarding cochannel station WJSP-FM, GPTC states that it owns that station, so consent from the licensee is not necessary. GPTC believes it can eliminate all of the cochannel interference that would be created between the two stations by simulcasting the same programming and by employing Synchrocast technology. Synchrocast is said to employ the Global Positioning System and precise digital delays to eliminate interference between stations.

GPTC states that it would be willing to accept three conditions on the grant of a construction permit: (1) that the new station and WJSP-FM must simulcast programming and employ the Synchrocast technology, (2) the new station must remain located with WRAS (FM), and (3) the new station and WJSP-FM must remain licensed to the same entity. GPTC states that, as a state entity, it does not sell its stations, and has not done so in the forty years of GPTC's existence. In conclusion, GPTC believes that its proposal will serve the public interest.

Discussion. GPTC provides a valuable service to the people of Georgia, and we encourage it to continue its longstanding mission. Nevertheless, we conclude that the proposal has serious deficiencies that render it unacceptable for filing, and contrary to the public interest.

First, GPTC's utter reliance on Synchrocast technology to eliminate cochannel interference to WJSP-FM is unpersuasive. The application contains only two pages of a promotional brochure from the manufacturer, the Harris Corporation. The brochure claims the SynchroCast3 product "optimizes the use of available frequencies" and "dramatically improves coverage areas" through the use of the Global Positioning System (GPS), microwave links, and simulcast programming. It is noteworthy that the brochure suggests that reception *can* be improved, not that it *will* be improved. Completely absent from this material is any discussion or data addressing how well such a system functions over wide areas or under conditions of multipath or "picket fencing" (rapidly changing signal strength), both of which can be common in urban areas. Also conspicuously absent is any discussion as to the compatibility of the Synchrocast system with the new IBOC digital system now being rapidly implemented across the country. At best, we can only conclude that while *some* interference between the new station and WJSP-FM *might* be mitigated, all of it cannot be. Loss of existing service can be expected well within WJSP-FM's existing service area, and interference-free service from the new station in Atlanta will be far less than the applicant expects.

The association of a broadcast station with a community of license is a basic tenet of the Commission's allocations scheme for broadcast stations. Section 307(b) of the Communications Act of 1934, 47 U.S.C. §307(b), mandates that the "Commission shall make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution to each of the same. Implicit in this statement is a recognition that the Commission must protect such service to the community of license from interference from other stations. Moreover, the community of coverage rule is designed to insure that the community of license receives a premium signal. *Lester H. Allen*, 17 FCC 2d 225, 226 (1969). In the present instance, such assurance cannot be given.² Consequently, we will continue to rely on Section 73.509 and related precedent in evaluating the proposed cochannel interference.

In a factually similar case in 1993, the Commission denied an application for review in which an applicant for a new FM broadcast station sought waiver of Section 73.509 to create first-adjacent channel prohibited contour overlap.³ That applicant had emphasized the very large population in Chicago which would receive new service, its unique programming format, and that it would be forced to limit its ERP to only 75 watts were it required to comply with Section 73.509. The Commission upheld the staff's denial of that application, stating that

the staff, citing *Board of Education of the City of Atlanta*, 48 RR 2d 637, 639 (1980), correctly noted that increased coverage at the expense of objectionable interference alone does not justify a waiver of the FM allocations rules. A comparison between the number of people served and the number precluded is not now and never has been the pertinent standard for judging the preclusionary effect of a NCE-FM proposal. It is the overall scheme of NCE-FM allocations which

² *Letter re KDAY (FM), Independence, CA*, DA 94-510, 9 FCC Rcd 2753 (1994).

³ *Open Media Corporation*, 8 FCC Rcd 4070 (1993).

is paramount, and when faced with a choice between a larger service area with no overlap on one hand, and a lesser coverage with no prohibited contour overlap on the other, the Commission favors the latter. See *Educational Information Corporation*, 6 FCC Rcd 2207 (1991).

The Commission further continued:

Further, while Open Media seeks to achieve what it believes to be a commendable objective, it is well established that our policy of refusing to base waivers of rules designed to prevent interference upon non-technical considerations such as ownership or programming is a rational implementation of our mandate to '[m]ake such regulations not inconsistent with law as [we] may deem necessary to prevent interference between stations....' 47 U.S.C. Section 303(f). This policy has been approved by the courts. [case citations omitted here]⁴

Therefore, we do not consider GPTC's programming format nor its status as a state-authorized broadcaster in support of the requested waivers of Section 73.509. Rather, we focus solely on the technical considerations of this proposal.

GPTC's proposal does not compare favorably with *Open Media Corporation*. Over Atlanta we would have cochannel (same frequency) prohibited contour overlap, as compared to the less-egregious first-adjacent channel prohibited contour overlap in *Open Media Corporation*.⁵ The proposed new station's 60 dBu service contour is completely encompassed by the 40 dBu interfering contour of WJSP-FM, while the proposed 40 dBu interfering contour for the new station covers approximately one-third of WJSP-FM's licensed service contour.⁶ These prohibited contour overlaps, singly or together, are far in excess of any considered in *Open Media Corporation*, and the contour overlap proposed here affects not only the proposed station but also the existing licensed WJSP-FM.⁷ Moreover, cochannel interference cannot be eliminated by the receiver because both stations operate on the same frequency. Consequently, we conclude that waiver of Section 73.509 is not warranted with respect to cochannel WJSP-FM.

That GPTC would own both stations and is willing to conduct the experiment does not change our determination. As the Commission stated in *Board of Education of the City of Atlanta (WABE)*:⁸

[The applicant] has apparently decided that whatever reception of WEPR may be possible by people living in the proposed [cochannel] interference area may be disregarded if WABE and WEPR so agree. We cannot accept this conclusion. The Commission has consistently prohibited applicants and licensees from negotiating among themselves which areas may receive interference. See *Open Media Corporation*, 8 FCC Rcd 4070 (1993). This prohibition is grounded in the requirements of Section 307(b) of the Communication Act. Under that provision, the Commission must ensure the "fair, efficient, and equitable distribution of radio service" around the country. We are convinced that permitting negotiated interference agreements could thwart the "fair" and "equitable" distribution of service because licensees might see an

⁴ *Open Media Corporation*, 8 FCC Rcd at 4071.

⁵ In fact, GPTC shows that the proposed 60 dBu protected service contour of the proposed station would overlap the licensed 60 dBu contour of WJSP-FM, in an area of 18.59 sq. km containing 2,102 people!

⁶ GPTC failed to provide any figures for the areas and populations within the prohibited contour overlap areas. These figures are necessary for a proper analysis of the waiver requests of Section 73.509. That omission, in and of itself, is sufficient to render the application unacceptable for filing. See *Saddleback Community College*, FCC 96-369, 11 FCC Rcd 11938, 11940-41 (1996).

⁷ In addition, the presence of not one but two interfering channels on the same frequency would very likely diminish the probability of reception of existing adjacent channel stations, in areas all around Atlanta, resulting in additional loss of programming choices in the Atlanta area. See *Board of Education of the City of Atlanta (WABE)*, FCC 96-20, 11 FCC Rcd 7763, 7766 ("Adding an interfering signal to the area will clearly diminish the probability of satisfactory reception in this area"). This adverse effect on reception of adjacent channel stations would occur even if the Synchrocast system worked as advertised.

⁸ *Board of Education of the City of Atlanta (WABE)*, 11 FCC Rcd 7763, 7764. See also *Open Media Corporation*, 8 FCC Rcd at page 4071, paragraph 8 ("we established that that we were the sole arbiter in determining interference standards and disallowed applicants from negotiating interference on a case-by-case basis").

advantage in compromising service to small communities and rural areas if, in exchange for that compromise, they could improve their coverage of more heavily populated urban areas. As noted in *Pasadena Broadcasting v. FCC*, 555 F.2d 1046 1050 (D.C. Cir. 1977), this possibility that service might become very concentrated in urban areas while less populated areas remain unserved or underserved is “precisely the result Congress meant to forestall by means of Section 307(b).”

In the present case, GPTC’s proposal to create a new station in Atlanta would come at the expense of existing service from WJSP-FM in suburban communities to the south of Atlanta. It would also come at the expense of areas toward the edge of but still within the proposed new station’s 60 dBu protected service contour.

Continuing onward, the *Board of Education of the City of Atlanta* states:

We also believe that permitting negotiated interference agreements would undermine the statute’s mandate to ensure “efficient” use of the spectrum. The Commission’s technical requirements respond to that mandate by protecting licensees from impermissible interference within their service areas. The protection of any given licensed facility, however, by necessity limits construction or modification of other nearby facilities. Underlying the technical requirements and this potential “preclusionary” effect is the basic premise that licensed facilities will provide adequate service throughout their protected service area. Permitting licensees themselves to determine when circumstances warrant modifying a protected service area permits withdrawal of that station’s service from the public without altering the preclusionary effect that the facility has on other facilities.... [W]e conclude that ... [WABE’s appeal] would have been denied notwithstanding WABE’s submission of an engineering analysis it claims supports waiver of Section 73.509 and notwithstanding its negotiated agreement with WEPR concerning interference.

Consequently, GPTC’s ownership of both WJSP-FM and the proposed station is not a factor providing strong support of the requested waiver of Section 73.509.

Additionally, GPTC employs supplemental calculations based on the Longley-Rice method in its attempt to show that no interference would be created between WJSP-FM and the proposed new station. We find that waiver of Section 73.509 to permit the acceptance of GPTC’s supplemental showing is not warranted. In *Certain Minor Changes Without a Construction Permit*, 12 FCC Rcd 12371, 12401-12403, the Commission stated its policy with respect to supplemental showings pertaining to interference calculations:

First and foremost, we want to emphasize that supplemental showings have not been accepted, nor will be accepted, for the purpose of demonstrating interference or prohibited contour overlap between FM broadcast stations. ... To employ supplemental showings in this manner would represent a fundamental change as to how contour protection applications are processed, and would require a separate rulemaking proceeding to specify standards, methods and assumptions, and possibly revised definitions for protected service areas and interference.

That policy has not changed.⁹ Nor has the applicant provided compelling justification why the longstanding prohibition against using supplemental analyses for predicting interference or contour overlap in the FM radio service should be set aside in this instance, apart from the obvious fact that such results favor the applicant. Consequently, we will not accept this analysis in support of the request for waiver of Section 73.509.

Nor do the proposed conditions on the grant support GPTC’s request for waiver. The proposed conditions requiring simulcasting and use of Synchrocast technology at the proposed new station would effectively foreclose GPTC from making future improvements to either station or taking advantage of technical changes or station arrangements that might occur in the future. It also would foreclose the possibility of independent programming for each station should GPTC someday find that desirable. The proposed condition that WJSP-FM and the proposed new station must be licensed to the same owner could not be enforced. While GPTC may not have assigned any of its stations to a new owner to date, the possibility remains that at some future date the licensee

⁹ In MM Docket 98-93, the Commission initiated consideration of the point-to-point propagation method for use in the FM service. However, in the *Second Report and Order* in MM Docket 98-93, 15 RCD 16149 (2000) at Paragraph 8, the Commission stated that it was likely that “several program modifications” were under consideration that could affect the results obtained from the analysis. As of this time the point-to-point method is still being reviewed.

might find it advantageous to do so. The proposed condition requiring the new station remain colocated with WRAS is the most problematic of all. The University of Georgia would permit GPTC to mount an antenna on its tower, colocated with WRAS, but it has not committed itself to limiting operation forever to its licensed facilities at the same site. Should WRAS decide to move to another site at some future date, we cannot predict whether GPTC's station would be able to move to the same location.

Lastly, we consider GPTC's request for waiver of Section 73.509 to colocate with second-adjacent channel station WRAS (FM). Presently, the Commission's rules require stations located on the same tower to be at least four channels apart. These rules are designed to minimize interference in the areas surrounding the tower. They also form the primary means of compliance with Section 307(b) of the Communications Act for noncommercial educational FM stations in the reserved band (below 92 MHz), by requiring stations to locate their transmitter sites outside of the 60 protected service contour of a second- or third-adjacent channel station. Application of the rule helps to ensure that suburban and rural areas are not denied service by the concentration of stations in urban areas (the preclusionary effect referred to above). Application of the rule also gives existing adjacent channel stations the opportunity to improve coverage in compliance with the contour protection rule. But in the present case, we would have two noncommercial educational FM second-adjacent channel stations licensed to the same community (Atlanta) operating only two channels apart. We are not aware of any situation where a similar operation has been approved, nor has GPTC cited any precedent.¹⁰ And GPTC's contention that no interference area will be created by the colocation of the two stations, does not differ from the "masked interference" argument rejected in *Greater Media Radio Company, Inc.*, 15 FCC Rcd 7090, 7099-7100 (1999), *petition for reconsideration denied*, 15 FCC Rcd 20485 (2000).¹¹ Consequently, waiver of Section 73.509 with respect to WRAS will also be denied.

Conclusion. We find that the proposal advanced here would not serve the public interest. The requests for waiver of Section 73.509 with respect to WRAS (FM) and WJSP-FM ARE DENIED. Application BNPED-20071022BFU, being unacceptable for filing, IS DISMISSED. This action is taken pursuant to Section 0.283 of the Commission's Rules.

Sincerely,

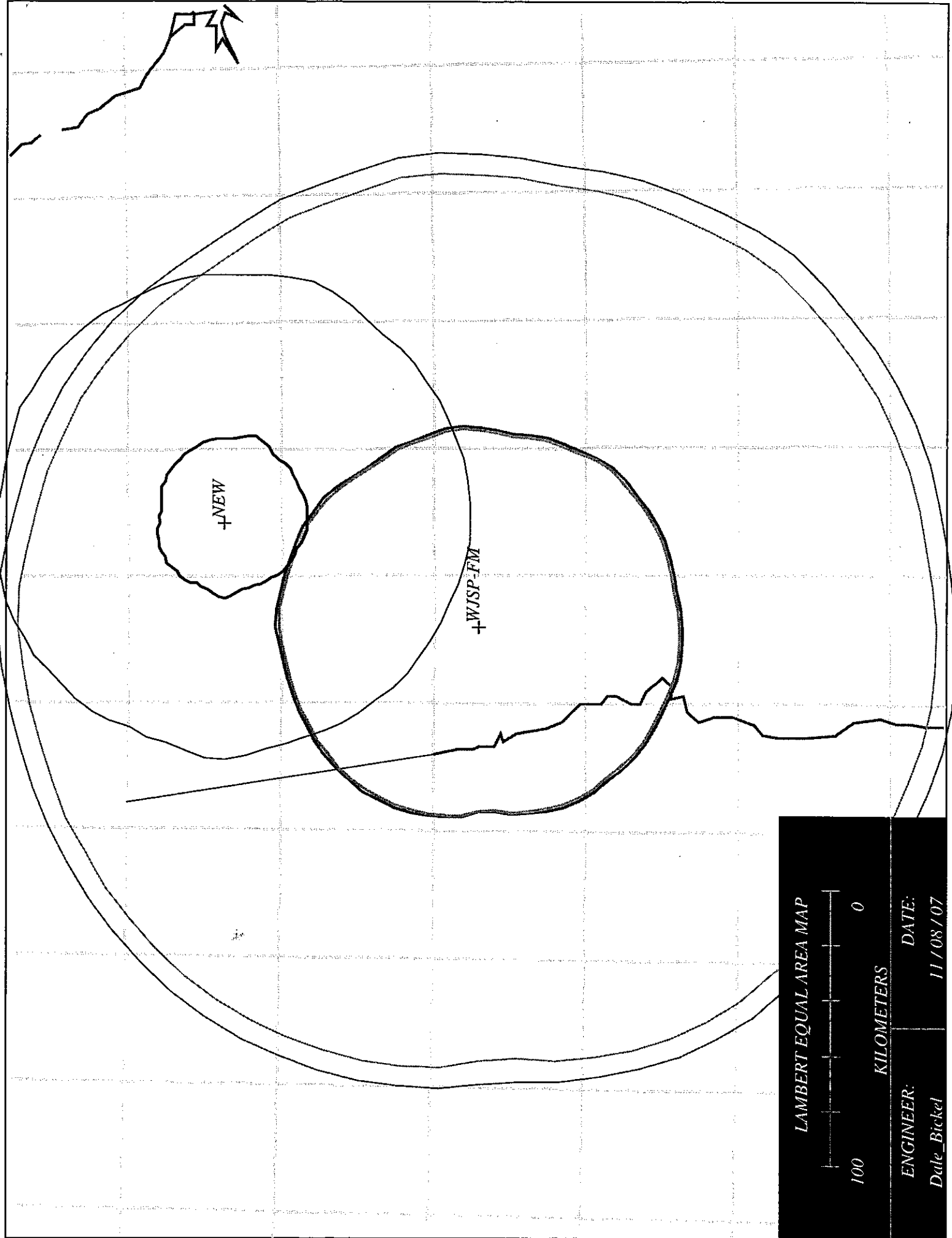


Dale E. Bickel
Senior Electronics Engineer
Audio Division
Media Bureau

cc: Kessler & Gehman

¹⁰ *Educational Information Corporation (WCPE)*, 6 FCC Rcd 2207 (1991), indicated that the Commission would consider waiver of Section 73.509 for existing second- and third-adjacent channel stations seeking to significantly expand service, where adequate justification for the waiver request was presented. However, this case is silent on the applicability of this procedure with respect to *new* stations. We do not believe that the Commission intended to relax the second- and third-adjacent channel prohibited contour overlap requirements for new stations, particularly in light of Section 307(b).

¹¹ By "masked interference" we refer to the situation where prohibited overlap from one station covers the same area as prohibited contour overlap created by a second station.



LAMBERT EQUAL AREA MAP

0
100
KILOMETERS

ENGINEER:

Date_Bickel

DATE:

11/08/07

THE FOLLOWING IS A LIST OF THE DATA WHICH APPEARED ON THE DDOT LHM
BOTTOM LATITUDE: 31.31 TOP LATITUDE: 34.39 LEFT LONGITUDE: -86.70 RIGHT LONGITUDE: -82.64
MAP: ENLARGED CONUS MAP PROJECTION: Lambert Equal-area CENTER LAT: 32.85 LONG: -84.67 GRID SPACING: 0.50
KILOMETERS / INCH = 43.09
PLOT MADE ON: 8 November, 2007 6:50 HOURS

call	serv	city, state	application no.	contour	chan	erp	haat	rcamsl	coverage area	A1	A7
WJSP-F	FM	WARM SPRINGS, GA	BLED-19850227KG	60.0 dBu	(50,50)	201C	100.000	569.0	16840.1 sq km	0	0
WJSP-F	FM	WARM SPRINGS, GA	BLED-19850227KG	40.0 dBu	(50,10)	201C	100.000	569.0	94454.8 sq km	0	0
WJSP-F	FM	WARM SPRINGS, GA	BPED-20070705ADR	60.0 dBu	(50,50)	201C1	42.000	679.5	16396.5 sq km	0	0
WJSP-F	FM	WARM SPRINGS, GA	BPED-20070705ADR	40.0 dBu	(50,10)	201C1	42.000	679.5	86293.4 sq km	0	0
NEW	FM	ATLANTA, GA	BNPED-20071022BFU	60.0 dBu	(50,50)	201C3	6.500	361.0	2433.7 sq km	0	0
NEW	FM	ATLANTA, GA	BNPED-20071022BFU	40.0 dBu	(50,10)	201C3	6.500	361.0	23595.8 sq km	0	0

No topographic data is available for this location.
A1 - Number of radials where free space equation was used for field strength calculations.
A7 - Number of radials where a HAAT less than 30 meters was adjusted to 30 meters.